

ABSTRACT

An apparatus and method for overcoming pilot pollution in a wireless communications network. The apparatus boosts a preferred pilot signal within a geographical area that is suffering from pilot pollution. The boosted pilot signal is stronger than the pollution in this area, and causes mobile stations to lock onto the boosted pilot signal rather than the pollution. A directional receiving antenna on the apparatus receives the preferred pilot signal from a selected base station. After amplifying the preferred pilot signal, the apparatus transmits the boosted pilot signal from an antenna within the geographical area. In this manner, mobile stations lock communicate with the selected base station when within the geographical area rather than the base station responsible for the pilot pollution. This may result in fewer dropped calls from the network and fewer inappropriate hand-offs.